AMENDMENTS TO THE CLAIMS:

Replacement Claim Set:

1. (Previously Presented) A method of forming a coating on a stent, comprising:

applying a coating formulation to a stent, the coating formulation including a first ingredient and a second ingredient; and

modifying the ratio of the first ingredient with respect to the second ingredient in the coating formulation as the coating formulation is being applied to the stent.

2. (Original) The method of Claim 1, wherein the act of applying comprises spraying the coating formulation on the stent.

3. (Original) A stent comprising a coating produced in accordance with the method of Claim 1, wherein the coating has a first region and a second region wherein the quantity of the first ingredient with respect to the second ingredient is different in the first region as compared to the second region.

4. (Original) The method of Claim 1, wherein the first ingredient is a polymeric material and the second ingredient is a therapeutic substance.

5. (Previously Presented) The method of Claim 4, wherein the polymeric material is selected from the group consisting of an ethylene vinyl alcohol copolymer, poly(butylmethacrylate), poly(ethylene glycol), amorphous Teflon, and poly(ethylene-co-vinyl acetate).

6. (Original) The method of Claim 4, wherein the therapeutic substance is selected from the group consisting of actinomycin D, paclitaxel, docetaxel, rapamycin, β-estradiol and BAK Heparin.

7. (Original) The method of Claim 1, wherein the first ingredient is a first polymeric material and the second ingredient is a second polymeric material.

8. (Original) The method of Claim 1, wherein the ratio is modified by gradually increasing the concentration of the first ingredient in the coating formulation from the initiation of the application of the coating formulation to the stent until the termination of the application of the coating formulation to the stent.

9. (Withdrawn) A system for applying a coating on a stent, comprising:

a nozzle for spraying a composition onto a stent;

a first reservoir in fluid communication with the nozzle for supplying a first ingredient of the composition to the nozzle;

a second reservoir in fluid communication with the nozzle for supplying a second ingredient of the composition to the nozzle; and

a control assembly for adjusting the amount of the first or second ingredient that is fed into the nozzle wherein the amount of the first and second ingredient that is sprayed by the nozzle can be modified by the control assembly without interrupting the application of the composition onto the stent.

10. (Withdrawn) The system of Claim 9, further comprising a mixer for mixing the first ingredient with the second ingredient.

11. (Withdrawn) The system of Claim 9, wherein the first ingredient is a polymeric material and the second ingredient is a therapeutic substance.

12. (Withdrawn) The system of Claim 9, wherein the first ingredient is a first polymeric material and the second ingredient is a second polymeric material.

13. (Withdrawn) The system of Claim 9, wherein the control assembly includes a valve for adjusting the input rate of the first or second ingredient to the nozzle.

14. (Withdrawn) An implantable medical device comprising a coating having a first ingredient and a second ingredient, wherein from a deep region of the coating to a more shallow region of the coating, the ratio of the concentration of the first ingredient to the concentration of the second ingredient gradually increases or decreases.

15. (Withdrawn) The implantable medical device of Claim 14, wherein the first ingredient is a polymeric material and the second ingredient is a therapeutic substance.

16. (Withdrawn) The implantable device of Claim 15, wherein the polymeric material is selected from the group consisting of ethylene vinyl alcohol copolymer, polybutylmethacrylate, polyethylene glycol, amorphous Teflon, and poly(ethylene-co-vinyl acetate).

17. (Withdrawn) The implantable device of Claim 15, wherein the therapeutic substance is selected from the group consisting of actinomycin D, paclitaxel, docetaxel, rapamycin, β-estradiol and BAK Heparin.

18. (Withdrawn) The implantable medical device of Claim 14, wherein the first ingredient is a first polymeric material and the second ingredient is a second polymeric material.

19. (Withdrawn) The method of Claim 1, wherein the first and second ingredients are different therapeutic substances.

20. (Previously Presented) The method of Claim 1, wherein the modifying comprises maintaining the amount of the first ingredient constant and increasing or decreasing the amount of the second ingredient.

21. (Previously Presented) The method of Claim 1, wherein the coating formulation is applied to form a coating that includes a first region and a second region above the first region, and wherein the first region is free from the second ingredient.

22. (Previously Presented) The method of Claim 21, wherein the first ingredient is a first polymeric material and the second ingredient is a second polymeric material, and wherein the first polymeric material is for increasing the adhesion of the coating on the stent, and the second polymeric material is for increasing the blood compatibility of the coating.

23. (Withdrawn) A method of forming a coating on an implantable medical device, comprising:

applying a coating formulation to an implantable medical device, the coating formulation including a first ingredient, a second ingredient and a third ingredient; and

modifying the ratios of the ingredients with respect to each other in the coating formulation while the coating formulation is being applied to the device.

24. (Withdrawn) The method of Claim 23, wherein the coating formulation is applied to form a coating that includes a first region, a second region and a third region.

25. (Withdrawn) The method of Claim 24, wherein the first ingredient is a first polymeric material, the second ingredient is a second polymeric material, and the third ingredient is a therapeutic substance, and wherein the first region is free from the second polymeric material, and the third region is free from the first polymeric material and the therapeutic substance.

26. (Withdrawn) The method of Claim 24, the modifying comprises maintaining the amount of at least one of the first, second or third ingredients constant.

27. (Withdrawn) The method of Claim 24, wherein the concentration of at least one of the first, second or third ingredients in the coating formulation increases or decreases at a constant rate as the coating formulation is being applied to the device.

28. (Withdrawn) The method of Claim 24, wherein the applying comprises spraying the coating formulation on the device.

29. (Withdrawn) A method of coating an implantable medical device, comprising:

applying a first composition onto an implantable medical device, the first composition including a first substance, a second substance and at least one solvent; and

applying a second composition onto the device before all of the solvent has been removed from the first composition on the device, the second composition having a different relative concentration of the first substance to the second substance as compared to the first composition.

30. (Withdrawn) The method of Claim 29, wherein the device is a stent.

31. (Withdrawn) The method of Claim 29, wherein the first and second substances are different polymeric materials.

32. (Withdrawn) The method of Claim 29, wherein the first and second substances are different therapeutic substances.

33. (Withdrawn) The method of Claim 29, wherein the first substance is a polymeric material and the second substance is a therapeutic substance.

34. (Previously Presented) A method of forming a coating on an implantable medical device, comprising:

applying a coating formulation to an implantable medical device, the

coating formulation including a first ingredient and a second ingredient; and

modifying the ratio of the first ingredient with respect to the second ingredient to form regions of a coating having a graduated interface between the first and second ingredients.

35. (new) The method of Claim 1, wherein the coating formulation additionally includes a third ingredient.

36. (new) The method of Claim 35, additionally comprising modifying the amount of the third ingredient as the coating formulation is being applied to the stent.

37. (new) The method of Claim 35, additionally comprising modifying the ratios of the first, second and third ingredients with respect to each other as the coating formulation is being applied to the stent.

38. (new) The method of Claim 35, wherein during the modifying, the amount of the third ingredient is keep constant.

39. (new) The method of Claim 35, wherein the first ingredient is a polymer, the second ingredient is a drug and the third ingredient is a solvent.

40. (new) The method of Claim 35, wherein the first ingredient is a first polymer, the second ingredient is a second polymer, and the third ingredient is a solvent.

41. (new) The method of Claim 35, wherein applying is by spraying.

42. (new) The method of Claim 35, wherein the first, second and third ingredients can each be any one of a polymer, a drug or a solvent.

43. (new) The method of Claim 1, wherein the amount of the first ingredient is zero at the start of the application of the coating formulation.

44. (new) The method of Claim 43, wherein the first ingredient is a drug.

45. (new) The method of Claim 1, wherein the amount of the first ingredient is zero at the start of the application of the coating formulation and sometime thereafter.

46. (new) The method of Claim 45, wherein the first ingredient is a drug.